

1 What is claimed is:

2 1. A method of analysis of statistical data to produce a set of expected value groupings of a total  
3 population from information obtained from sample populations, comprising the following steps:

4 a) calculating a ratio where the mean of a provided statistic is divided by the median of the  
5 sample population, this ratio a median ratio;

6 b) calculating, from a collection of the median ratios of step (a), the standard deviation of all  
7 of the median ratios of the sample population;

8 c) dividing the standard deviation of all of the ratios of the sample population by four;

9 d) establishing a median of this series of ratios and establishing groupings by moving in each  
10 direction from this median of median ratios by an amount determined from c) above;

11 e) calculating a ratio probability density distribution by dividing the actual number of ratios  
12 found in each grouping by the total of all ratios;

13 f) repeating steps a - e for several sample populations; and

14 g) reducing the ratio probability density distributions to a single composite **RPDD** figure.

15 2. The method of claim 1, further comprising the steps of:

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17 a) using the composite **RPDD** figure of claim1,  
18 to a set of lowest value, the median value, the average value of the sample population  
19 and adjusting to form an identical statement between ratio probability density distribution formed in  
20 step 1 to the sample distribution being analyzed in step two; and

21 b) comparing within groupings the expected to the actual number found.

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23 3. A method of analysis of statistical data by which a housing market analysis can be made to  
24 produce a set of expected value groupings of a total population from information obtained from  
25 sample populations, comprising the following steps:

- 1 a) using a median statistic and an average statistic in the sample, calculating a median ratio;  
2 b) calculating a standard deviation of these median ratios;  
3 c) dividing the standard deviation of the median ratios by four (4);  
4 d) using the median of the median ratios, establish groupings by moving in each direction from  
5 this median of the median ratios by the amount determined in step (c), these groupings being the ratio  
6 probability density distribution;  
7 e) combining the ratio probability density distribution (d) for the groupings where more than  
8 one median ratio is involved, by inspection and selection of a probability for a specific grouping so  
9 that the sum the of the probabilities selected total 50 percent for all groupings below the median and  
10 50 percent for all groupings above the median;  
11 f) using a formula  $1 - 1 \div (\frac{1}{2} \text{ grouping number} \times \frac{1}{2} \text{ grouping number})$  for determining the  
12 groupings right of the median above the number observable in the groupings, these new groupings  
13 being the ratio probability density distributions to form a set of expected statistics from the sample  
14 data;  
15 g) attaching the ratio probability density distributions to **RPDD** matching the entry values,  
16 median values, average values and total values of the same population;  
17 h) comparing the expected number of statistics within each number grouping and compare  
18 it with the actual number of statistics found in the same grouping and making statistical inferences  
19 as to past, present and future real estate needs.